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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,139	07/19/2004	Izuo Hirota	36714	1547

116 7590 07/01/2005

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EXAMINER

VAN, QUANG T

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,139

Applicant(s)

HIROTA ET AL.

Examiner

Quang T. Van

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-35 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 1-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

QUAYLE ACTION

This application is in condition for allowance except for the following formal matters:

Specification

1. The abstract of the disclosure is objected to because the legal phraseology such as "means" or "**comprises**" or "comprising" often used in patent claims should be avoided in the abstract. Further, the abstract is also objected because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. The claims 1-14 are objected to because the term "(hereinafter: object)" recited in claim 1, line 4 should not be in the claim. Correction is required.

Allowable Subject Matter

3. Claims 15-35 are allowed.

4. Claims 1-14 are allowed if overcome the above objections.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest a first movement detection section for detecting a movement of said object, and a storage section for storing a control value output by said control section or an output value of said output detection before said first movement detection section detects the movement of said object as recited in claims 1-14; a control section for controlling the output of said inverter, and a movement detection section which detects a state of operation of said inverter or a state of said object until the output of said induction heating coil increases gradually from a

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low output to a predetermined output to detect a movement of said object as recited in claims 15-22; a movement detection section for detecting a movement of said object, and a control section which controls the output of said inverter circuit, and when said movement detection section detects a movement of said object, performs the limiting operation to stop or limit the output of said inverter circuit wherein according to the settings at said input section, the detection sensitivity of said movement detection section is decreased or the detection thereof is stopped, or said limiting operation of said control section is weakened or is not performed as recited in claims 23-29; a control section for controlling the output of said inverter circuit in response to the output of said output detection section and the output of said movement detection section, and a movement detection stop input section for inputting a stop command to stop the detection operation of said movement detection section or to make said control section stop controlling the output in response to the output of said movement detection section as recited in claims 30-32; a control section for controlling the output of said inverter circuit in response to the output of said output detection section and the output of said movement detection section, and an output fixation input section for inputting an output fixation command, wherein when said output fixation command is input, said control section fixes the output of said inverter circuit regardless of whether said object has moved or not as recited in claims 32-35.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Aoki (US 4,900,884) discloses a composite cooking system having microwave heating and induction heating. Komuro et al (US 6,505,675) discloses a molten metal pouring time determining apparatus. Takagi et al (US 6,900,419) discloses a fixing apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T. Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QV
June 23, 2005



Quang T Van
Primary Examiner
Art Unit 3742